the load-modulated signal (FIG. 2: H). The load modulating section 60 includes an FET (Field Effect Transistor) 61 and a resistor 62.

[0024] If the resistor 62 is not provided, when the FET 61 is turned on, two differential inputs of a differential amplifier 81a are short-circuited. Therefore, a clock signal is not retrieved from a clock retrieving section 81 and power is not supplied to the IC chip 40. Accordingly, in the embodiment of the present invention, the resistor 62 is provided. However, the resistor 62 may have as small a resistance value as possible so as to allow significant load modulation to be applied. The resistor 62 may be omitted so long as the FET 61 has an on resistance needed for preventing the short-circuit. As long as the clock signal can be retrieved from the clock retrieving section 81, the resistance of the resistor 62 and the on resistance of the FET 61 may be minimized to allow significant load modulation to be applied.

[0025] In a conventional non-contact communication apparatus, an attempt to apply significant load modulation reduces power obtained by a power receiving circuit located inside the IC chip 40. Thus, the power fails to reach a value needed for operation of the IC chip 40, which stops operation. In contrast, in the embodiment of the present invention, even when the resistance of the resistor 62 and the on resistance of the FET 61 are minimized, the IC chip 40 does not stop operation as long as the clock signal can be retrieved from the clock retrieving section 81. This eases restrictions imposed when significant load modulation is to be applied. Therefore, the embodiment of the present invention allows significant load modulation to be applied. In the embodiment of the present invention,

51b Rectifier diode

52 Resistor

53 Capacitor

54 Capacitor

55 Comparator

60 Load modulating section

61 FET

62 Resistor

70 Power supply section

81 Clock ~~extracting~~ retrieving section

81a Differential amplifier

81b Comparator

82 Clock apparatus

91 First switch section

92 Second switch section